

ABSTRACT OF THE DISCLOSURE

A chemical pump includes a pressure chamber, a partition member for dividing the pressure chamber into a cleaning pressure chamber and a discharging pressure chamber, a filter part disposed on the primary side of the discharging pressure chamber, and a single drive mechanism. A pair of openings with respective check valves mounted therein are provided in each of the cleaning and discharging pressure chambers, and are positioned so as to cause a resist solution to flow only in the +Z direction. The drive mechanism moves the partition member in the -X direction to cause the resist solution to be sucked into the cleaning pressure chamber and to cause the resist solution to be discharged from the discharging pressure chamber. The drive mechanism moves the partition member in the +X direction to cause the resist solution to be sucked from the filter part into the discharging pressure chamber and to cause the resist solution to be supplied from the cleaning pressure chamber to the filter part so that the sucked resist solution is equal in amount to the supplied resist solution. This prevents vapor lock and micro-bubble phenomena during the discharge of the resist solution.